SYSBPM - Blacklist Maintenance

This function is used to maintain a blacklist of Natural objects which are not to be loaded into the buffer pool or, if they already are in the buffer pool, are to be deleted. If the cache is enabled, the objects will also be deleted from the cache.

The blacklist always applies to the currently active buffer pool.

You can add/delete individual objects to/from the blacklist (with the first function listed below). You can also create *object sets*: In such a set, you specify the objects not to be executed, and then only have to add a single set (instead of multiple individual objects) to the blacklist. You can also combine both, that is, you can add/delete objects to/from the blacklist individually as well as by sets.

An object set is stored as a Natural object of type "text".

For details on the blacklist, see the description of the Natural buffer pool in Natural Operations for Mainframes.

You can either select the Blacklist Maintenance function on the SYSBPM Main Menu, or invoke it by entering the direct command BLACKLIST.

The Blacklist Maintenance menu is then displayed, from which you can select the following functions:

- Maintain Blacklist
- List Object Sets
- Edit Object Set
- Add Object Set to Blacklist
- Delete Object Set from Blacklist

See also Blacklist Maintenance in Batch Mode.

Maintain Blacklist

This function is used to display the current blacklist, and add/delete objects to/from it.

You can either select this function on the Blacklist Maintenance menu, or invoke it by entering one of the direct commands ADD BLACKLIST, DISPLAY BLACKLIST or DELETE BLACKLIST.

The current blacklist, that is, a list of all objects currently on the blacklist, will be displayed.

Within the blacklist, you can scroll backwards or forwards by pressing PF7 or PF8 respectively.

By default, the "Maintain Blacklist" function is invoked in "Display Mode" (for displaying the blacklist and modifying and deleting entries). For adding objects to the blacklist, you use "Add Mode". To switch from one mode to the other, you use PF9.

Adding Objects to the Blacklist

To add objects to the current blacklist, you specify their library and object names along with the corresponding DBIDs and FNRs on this screen. Then you press PF5 to confirm the addition.

Deleting Individual Objects from the Blacklist

To delete an object from the blacklist, you mark it with the command "DE" in the first column of the screen. When you press ENTER, the marked objects will be deleted (and corresponding messages will be displayed).

Deleting All Objects from the Blacklist

To delete the entire blacklist, you press PF2. A window is then displayed in which you confirm the deletion by entering "Y". (Should you decide against the deletion, either press PF3 without entering anything in the window or enter "N".)

List Object Sets

This function displays a list of all defined object sets.

You can either select this function on the Blacklist Maintenance menu, or invoke it by entering the direct command LIST SET.

In the first column of the list, you can mark an object set with a command to edit or delete the object set or add/delete it to/from the blacklist. For a list of possible commands, you enter a question mark (?) in the first column.

Further commands can be entered in the command line. For a list of the commands

Edit Object Set

This function is used to create a new object set and to add/delete objects to/from an existing object set.

You can select this function on the Blacklist Maintenance menu, invoke it from the List Object Sets screen (see above), or invoke it by entering the direct command EDIT SET.

To create a new object set, you specify the function code and a library, but no object set name, on the Blacklist Maintenance menu. Within a new object set, you must enter library and object name. If DBID and FNR are left blank, they will be taken from the current FUSER and FNAT in the SYS-prefixed libraries. To modify an existing object set, you specify its name and library along with the function code on the Blacklist Maintenance menu.

A screen will be displayed on which you can add/delete objects to/from the object set. The editing functions provided on this screen are a subset of the functions provided by the Software AG Editor.

For a list of the editor commands available, you enter a question mark (?) in the command line. For a list of the line commands available, you enter a question mark (?) in the first column of the screen.

Add Object Set to Blacklist

This function is used to add all objects of an object set to the blacklist.

You can select this function on the Blacklist Maintenance menu, invoke it from the List Object Sets screen (see above), or invoke it by entering the direct command ADD SET.

When you invoke this function, all objects of the specified object set will be added to the blacklist.

Delete Object Set from Blacklist

This function is used to delete all objects of an object set from the blacklist.

You can select this function on the Blacklist Maintenance menu, invoke it from the List Object Sets screen (see above), or invoke it by entering the direct command DELETE SET.

When you invoke this function, all objects of the specified object set will be deleted from the blacklist.

BPMBLBAT - Blacklist Maintenance in Batch Mode

Online, you can lock individual objects against being executed by using the Blacklist Maintenance functions as described above.

In batch mode, you do this by using a Natural batch job that uses the program BPMBLBAT in library SYSBPM.

The program BPMBLBAT is used as follows:

- Start a Natural batch job in the usual way.
- The CMSYNIN file instructs the Natural nucleus to log on to SYSBPM and to execute the program BPMBLBAT.
- The next command from CMSYNIN is the FIN command.
- BPMBLBAT reads the input from the CMOBJIN file, where the first card must be in either of the following two formats:

Format 1: **FUNC=LOCK, BPNAME=***name***, LIB=***name***, DBID=***nnn***, FNR=***nnn*

Format 2: **FUNC=RLS, BPNAME=***name*

Format 1 causes objects to be put on the blacklist of the specified buffer pool (BPNAME=*name*) The following cards must contain in Positions 1 to 8 the name of the object to be locked. For each card, an entry is added to the blacklist with the specified object name and the corresponding library name, DBID and FNR. The last card must contain a period (.) to indicate the end of the input.

Format 2 causes the blacklist to be deleted, which means that no objects are locked in the specified buffer pool.

Example 1:

This JCL is an example of how to lock programs A, B and C in buffer pool V23GBP:

```
//SAGBAT     JOB  ,T.TEST,CLASS=K,MSGCLASS=X,REGION=2048K
//*
//NATURAL    EXEC PGM=NAT220OBT,PARM='IM=D,OBJIN=Y'
//STEPLIB    DD   DSN=OPS.SYSF.TESTNAT.LOAD,DISP=SHR
//           DD   DSN=OPS.SYSF.V5.ADALOD,DISP=SHR
//DDCARD     DD   *
ADARUN PROGRAM=USER,SVC=249,DATABASE=10,MODE=MULTI
//SYSOUT     DD   SYSOUT=X
//SYSUDUMP   DD   SYSOUT=X
//CMSYNIN    DD   *
LOGON SYSBPM
BPMBLBAT
FIN
//CMOBJIN    DD   *
FUNC=LOCK,BPNAME=V23GBP,LIB=SAGTEST,DBID=10,FNR=32
A
B
C
.
//CMPRINT    DD   SYSOUT=X
//
```

Example 2:

This JCL is an example of how to set to "0" the number of locked entries in buffer pool V23GBP:

```
//SAGBAT     JOB  ,T.TEST,CLASS=K,MSGCLASS=X,REGION=2048K
//*
//NATURAL    EXEC PGM=NAT220OBT,PARM='IM=D,OBJIN=Y'
//STEPLIB    DD   DSN=OPS.SYSF.TESTNAT.LOAD,DISP=SHR
//           DD   DSN=OPS.SYSF.V5.ADALOD,DISP=SHR
//DDCARD     DD   *
ADARUN PROGRAM=USER,SVC=249,DATABASE=10,MODE=MULTI
//SYSOUT     DD   SYSOUT=X
//SYSUDUMP   DD   SYSOUT=X
//CMSYNIN    DD   *
LOGON SYSBPM
BPMBLBAT
FIN
//CMOBJIN    DD   *
FUNC=RLS,BPNAME=V23GBP
//CMPRINT    DD   SYSOUT=X
//
```

